COVID-19 Windsor and Essex County: March 20, 2020 to July 24, 2020

Purpose

 Providing an epidemiologic summary of COVID-19 activity in Windsor and Essex County (WEC) to date

Source

- Windsor-Essex County Health Unit (WECHU), Infectious Disease Prevention (IDP) databases, extracted by Windsor-Essex County Health Unit [2020/07/16].
- Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Windsor-Essex County Health Unit [2020/07/16].
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Epidemiologic Summary: COVID-19 in Ontario January 15, 2020 to July 15, 2020). Toronto, ON: Queen's Printer for Ontario; 2020.
- Chung H, Fung K, Ishiguro L, Paterson M, et al. Characteristics of COVID-19 diagnostic test recipients, Applied Health Research Questions (AHRQ) # 2021 0950 080 000. Toronto: Institute for Clinical Evaluative Sciences; 2020.

Highlights

- At the time of reporting, there are 2,071 confirmed cases of COVID-19 in WEC between March 20th and July 23rd.
- The majority of cases in July have been from the agri-farm sector but the recent week has shown an increase in cases outside of this sector.
- Emergency department visits at Erie Shores HealthCare for symptoms associated with COVID-19 has increased dramatically in the past week.
- The current percent positivity, as of July 12 to July 18, is 4%. This displayed by the number of individuals and not tests, as one individual could have multiple tests.
 - However, there is a reporting lag for the most recent week.
- Based on the 7-day moving average, WEC remains high when looking at all cases in the community.
 - If agri-farm workers are excluded, the 7-day moving average has increased from 6 cases to 13 cases.
- Windsor and Essex County has the highest incidence rate in the province and is higher than the Ontario rate.
- Locally, Learnington has the highest COVID-19 incidence rate in Windsor-Essex followed by Kingsville and the City of Windsor.
- A higher proportion of individuals 20 to 39 years of age have COVID-19 in Learnington and Kingsville due to the agri-farm workers who are of the working age.
 - Tecumseh has a higher proportion of individuals 80 years or older with COVID-19
 - Amherstburg reported a higher proportion of children 0 to 19 years of age with COVID-19.

- In the last two weeks, 66% of the cases reported were among males and 34% were among females.
 - o 53% of the cases during this time period were among adults 20 to 39 years of age.
- Overall, the majority of the cases are from Learnington (37%), followed by Windsor (33%) and Kingsville (21%)
 - In the past 30 days, however, 47% of the cases have been from Leamington and 27% from Kingsville
 - In the past 7 days, however, 37% of the cases have been from Leamington, 31% from Windsor and 26% from Kingsville.
- The majority of cases identified are due to close contacts with individuals that were positive for COVID-19.
 - o This is similarly found among the agri-farm worker population
 - Outside of the agri-farm workers, most cases are exposed to the virus through close contact with another confirmed case.
- Coughing (63%) was the most commonly reported symptom among cases with COVID-19 followed by fever (49%), headache (48%) and fatigue (42%).
- COVID-19 cases that are hospitalized and in the ICU has increased since last week.
- Approximately 31% of cases are still in self-isolation while 64% of cases have resolved.
- The overall case fatality rate in WEC is 3.3%, lower than the province (7.2%).
- The day-over-day doubling time has been trending positively in Canada and in Ontario.
 - o In Windsor-Essex, the day-over-day doubling time has varied due to the number of agrifarm cases.
- The mean R₀ (effective) value is 0.83 and has decreased from last week.
 - o However, for the past month we have seen fluctuations with this number.



COVID-19 LIVE UPDATE

July 24, 2020

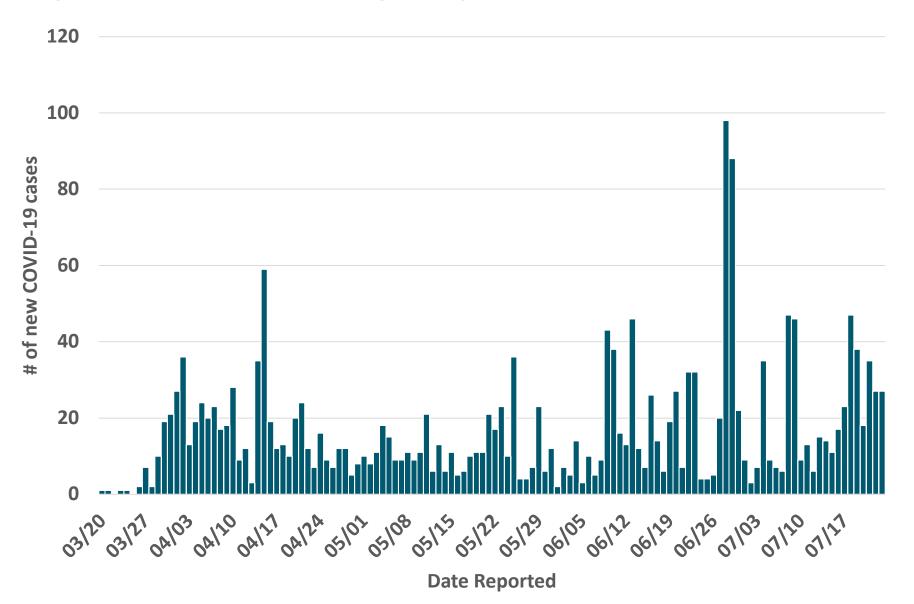
FOR UP-TO-DATE CASE NUMBERS VISIT wechu.org

COVID-19 Epidemiological Summary

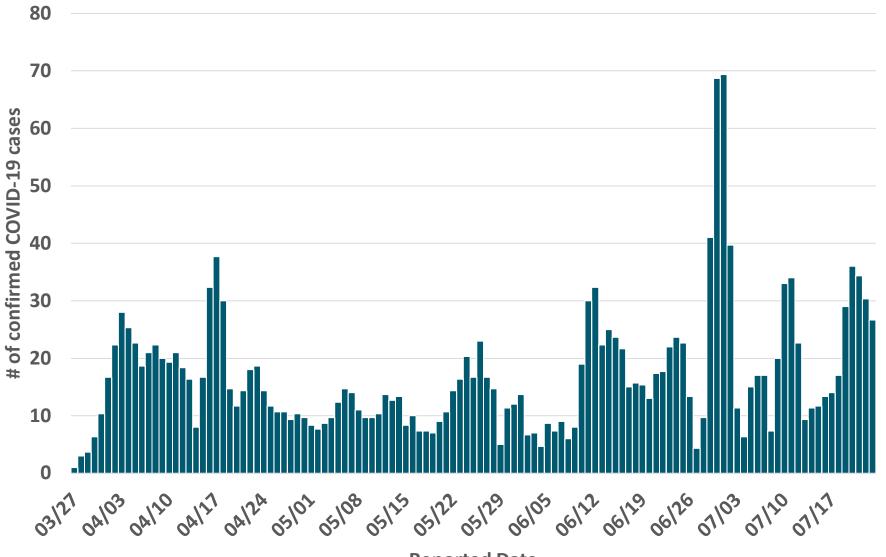
Content covered:

- Epidemic curves
- Regional & provincial rates
- Percent Positivity
- Positive test turnaround time
- Case investigation time
- Age & sex distribution
- Distribution by municipality
- Exposure history
- Healthcare worker status
- Underlying conditions
- Top symptoms
- Hospitalizations & ICU
- Healthcare system capacity
- Current outcomes
- Breakdown by deaths
- Doubling time
- Mean R0 (effective)

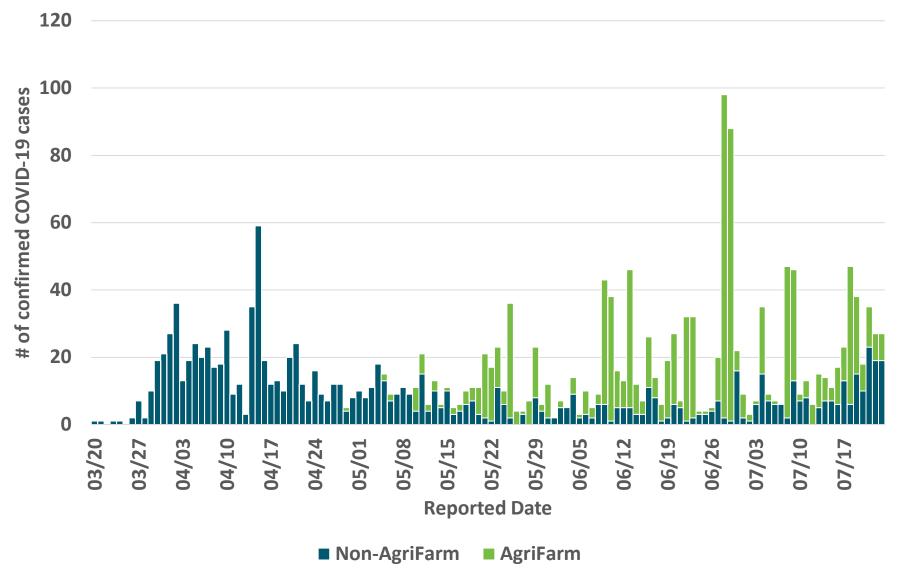
Epidemic Curve by Reported Date



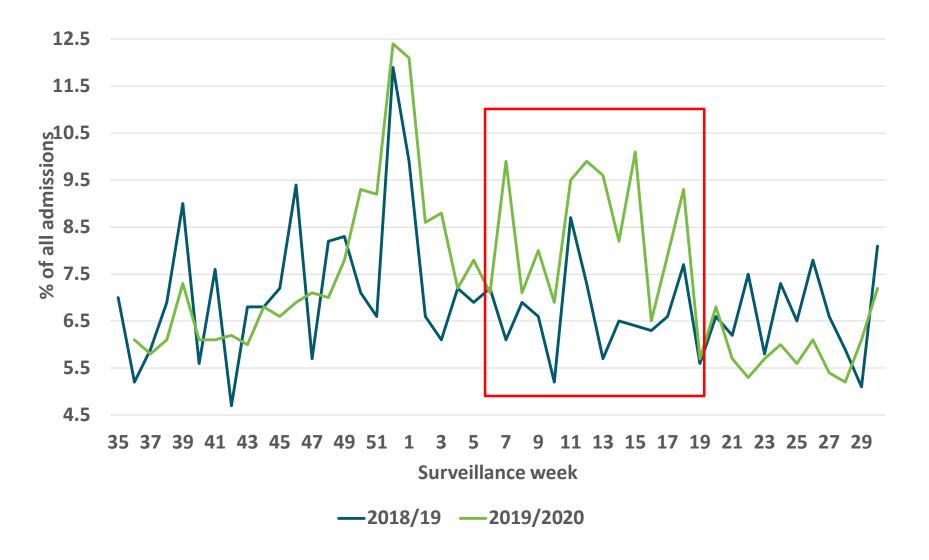
Epidemic Curve by 3-Day Moving Average by Reported Date



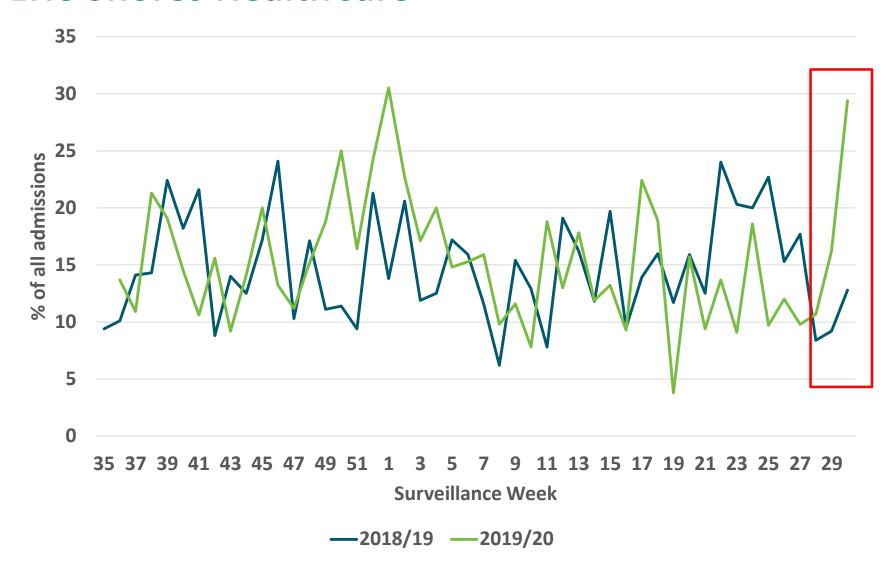
Epidemic Curve by Agri-Farms Versus Non-Agri- Farm Cases by Reported Date



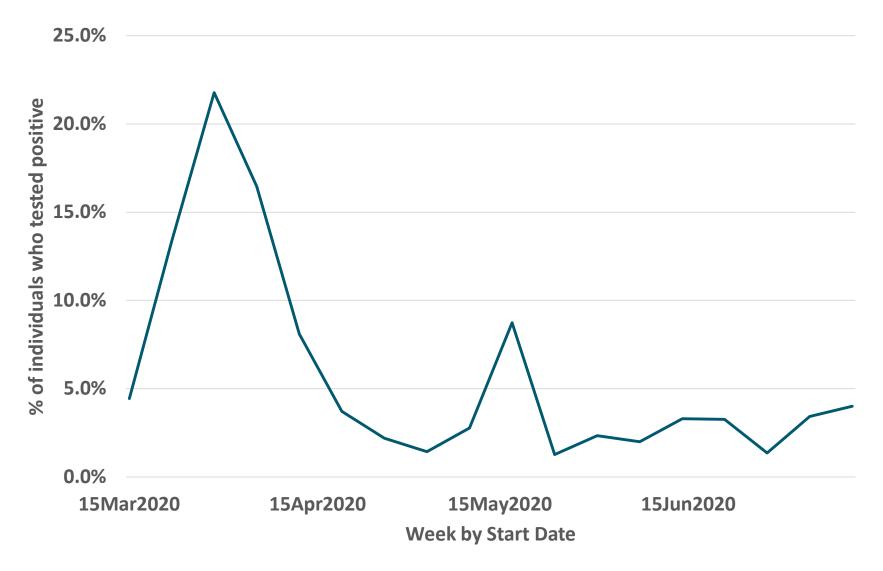
Emergency Department Visits By Syndromes



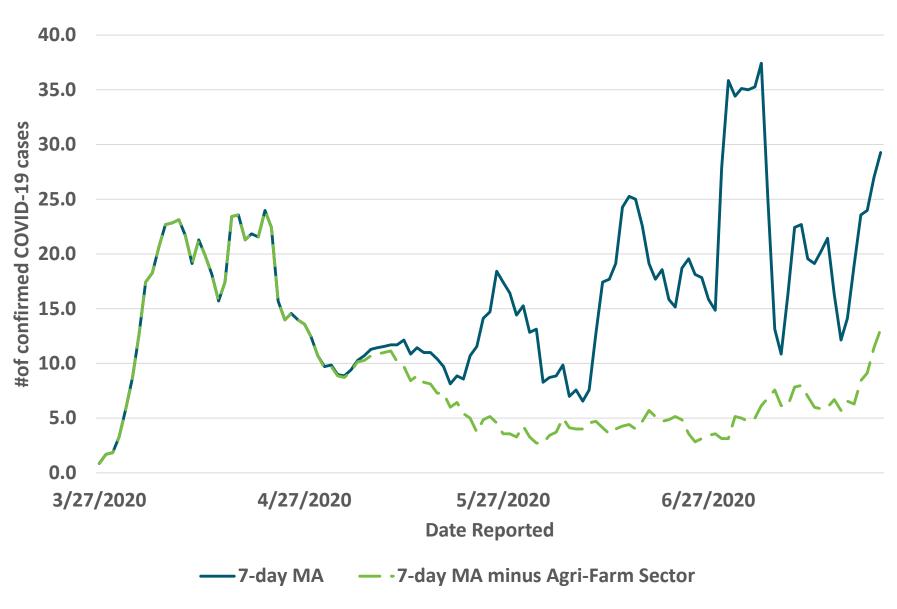
Emergency Department Visits by Syndromes For Erie Shores HealthCare



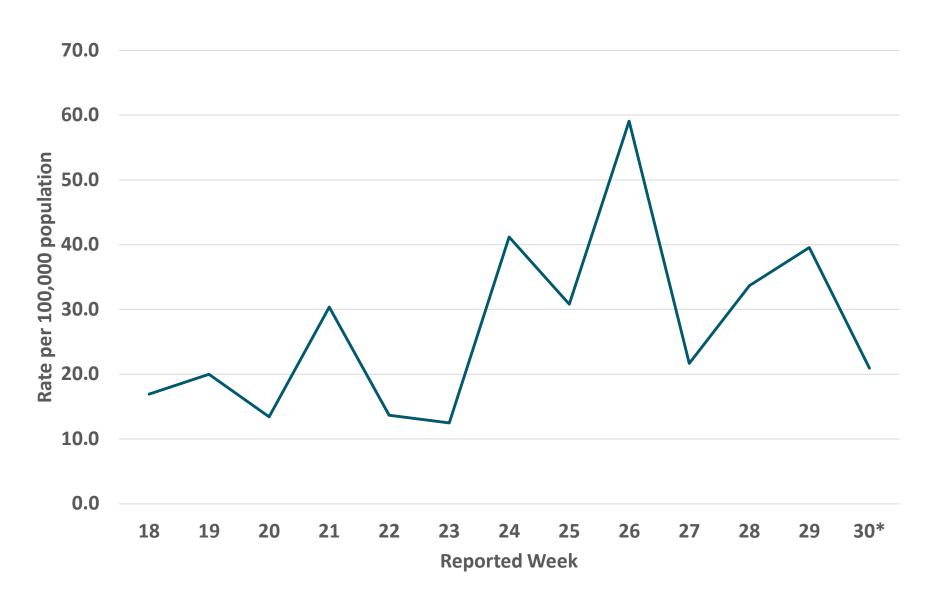
Percent Positivity by Week Among Unique Individuals



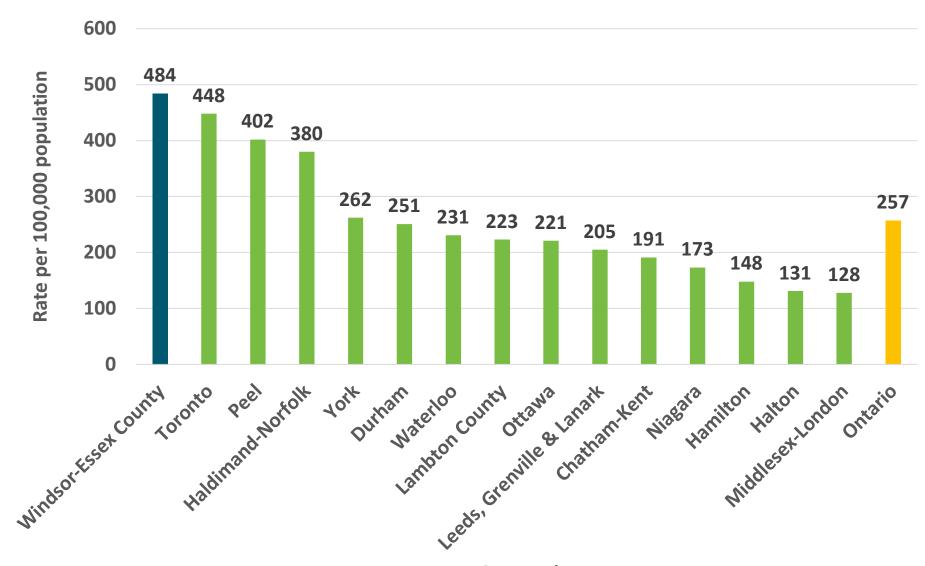
7-Day Moving Average by Reported Date



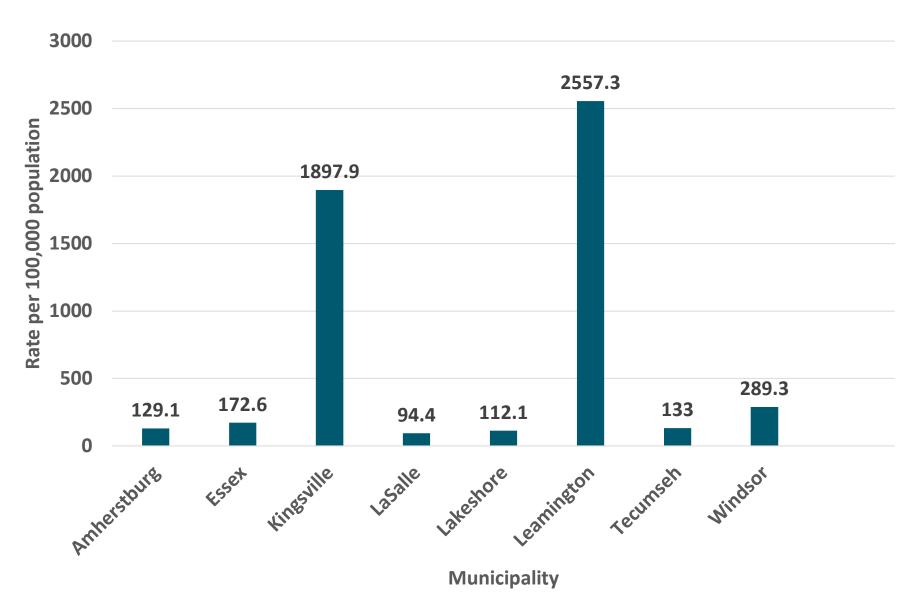
Windsor-Essex Rate by Reported Week



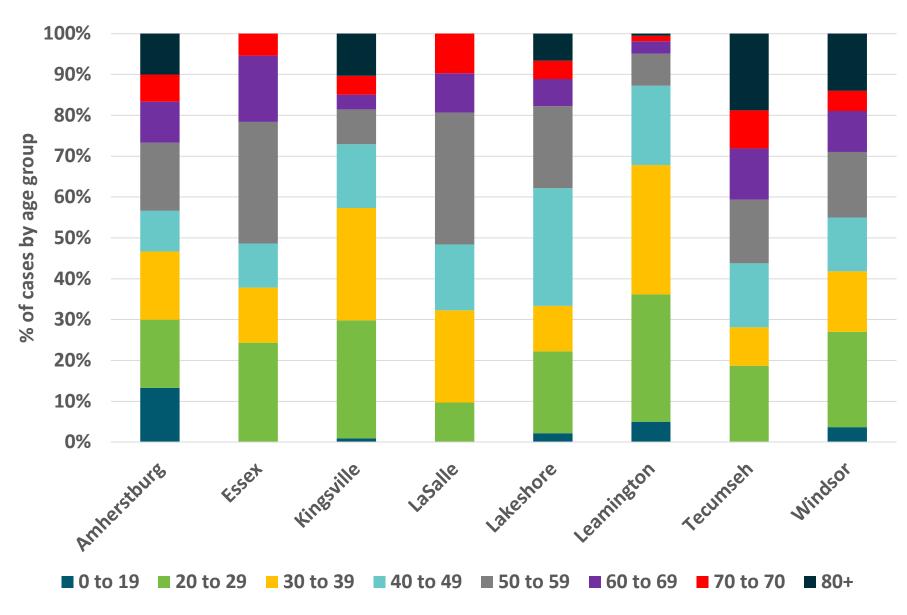
Regional & Provincial Rates



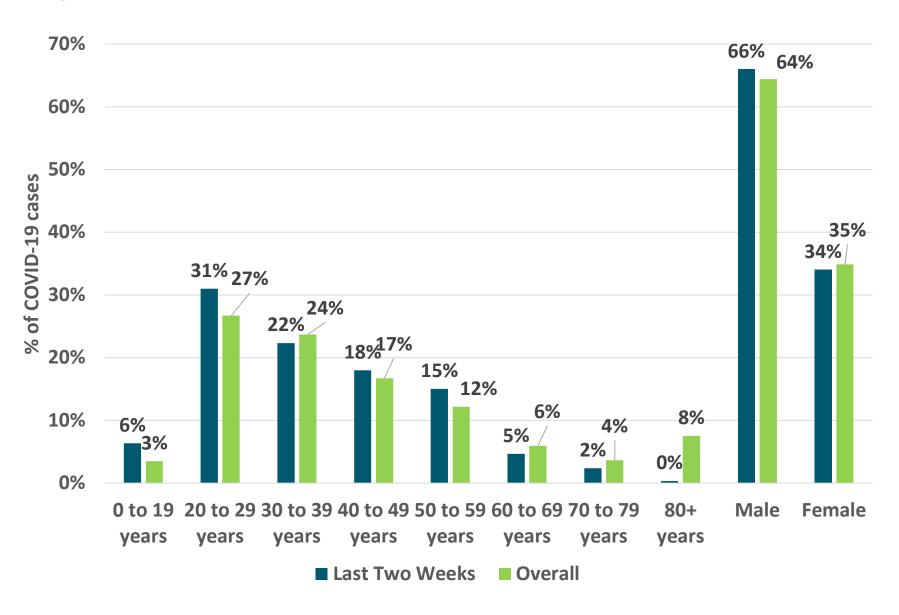
Rate per 100,000 by Municipality



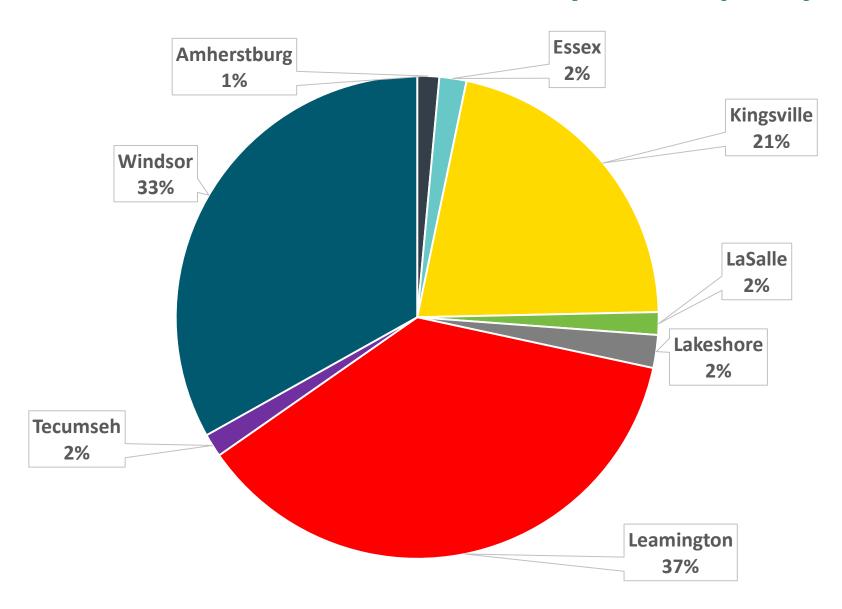
Age Breakdown by Municipality



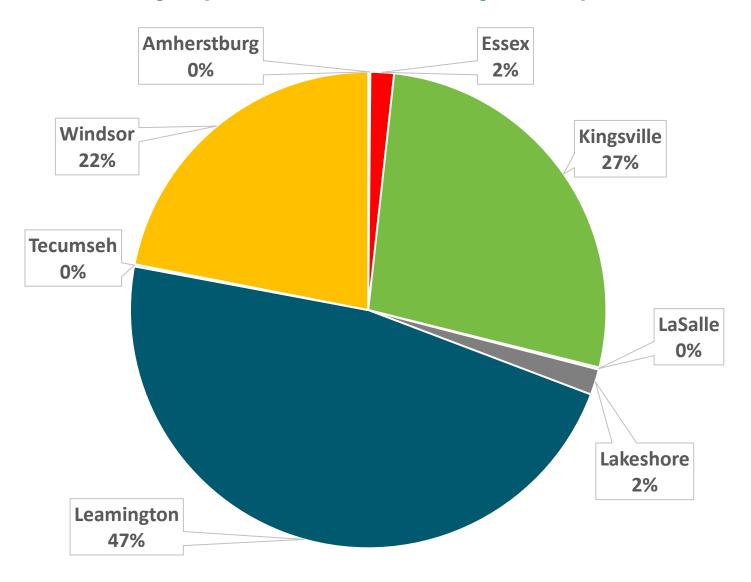
Age & Sex Distribution



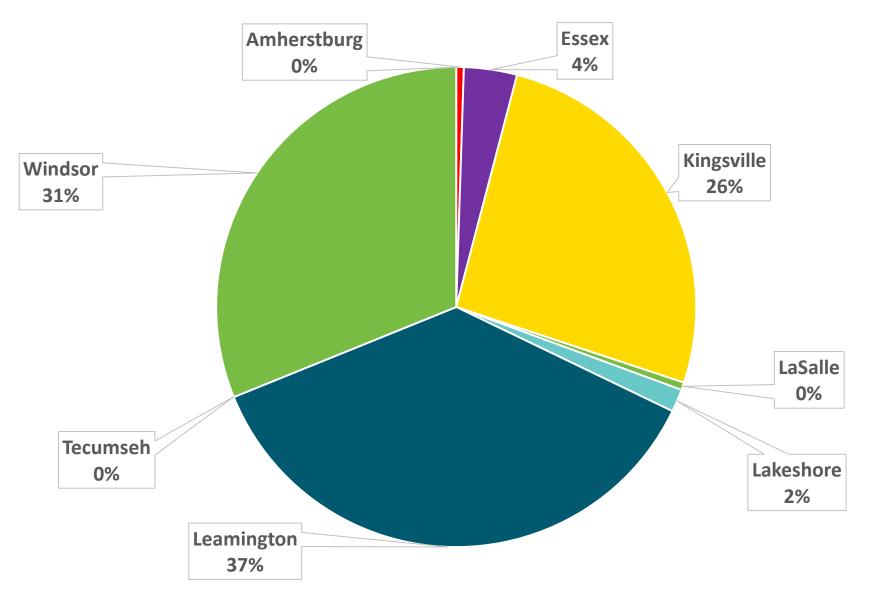
Distribution of COVID-19 Cases by Municipality



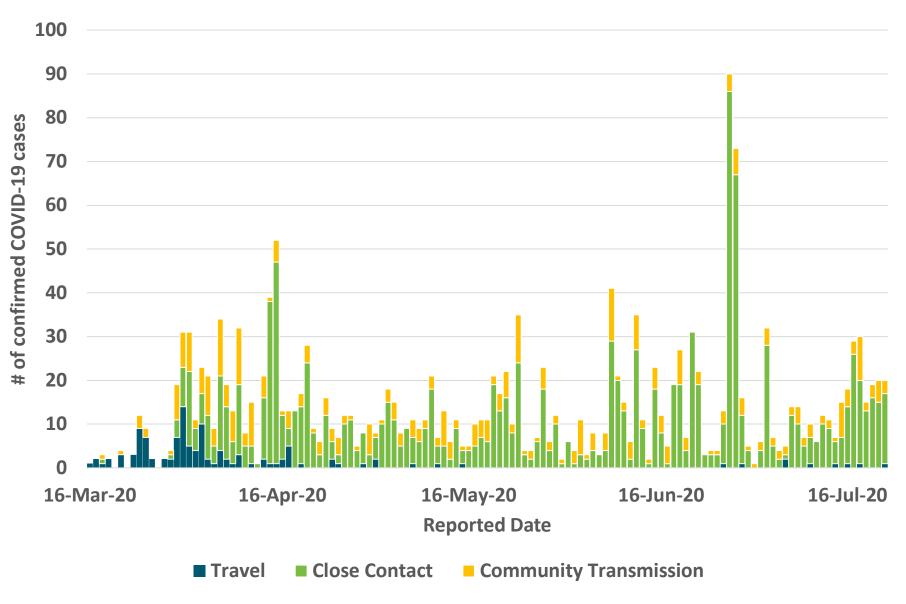
Distribution of COVID-19 Cases by Municipality in last 30 days (June 23rd to July 22nd)



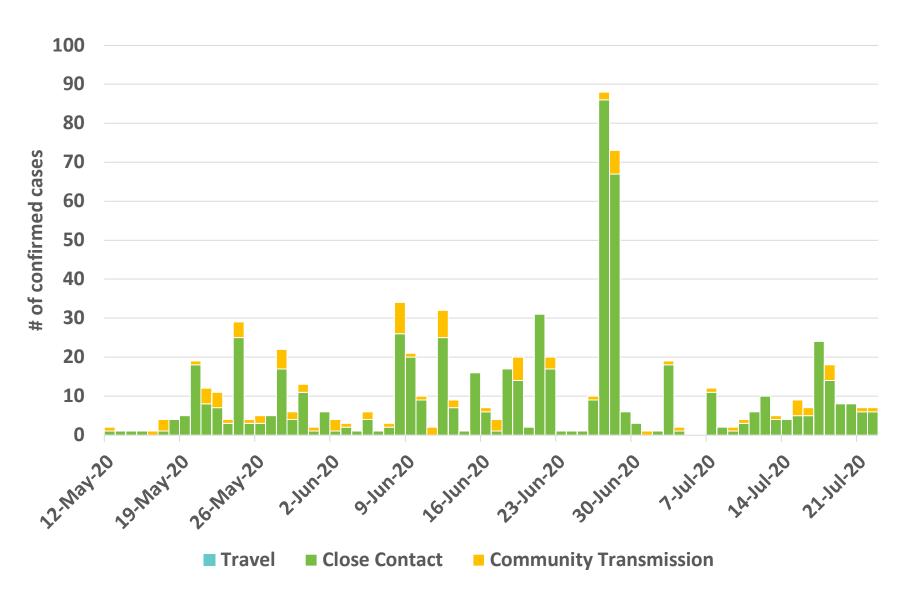
Distribution of COVID-19 Cases by Municipality in last 7 days (July 16th to July 22nd)



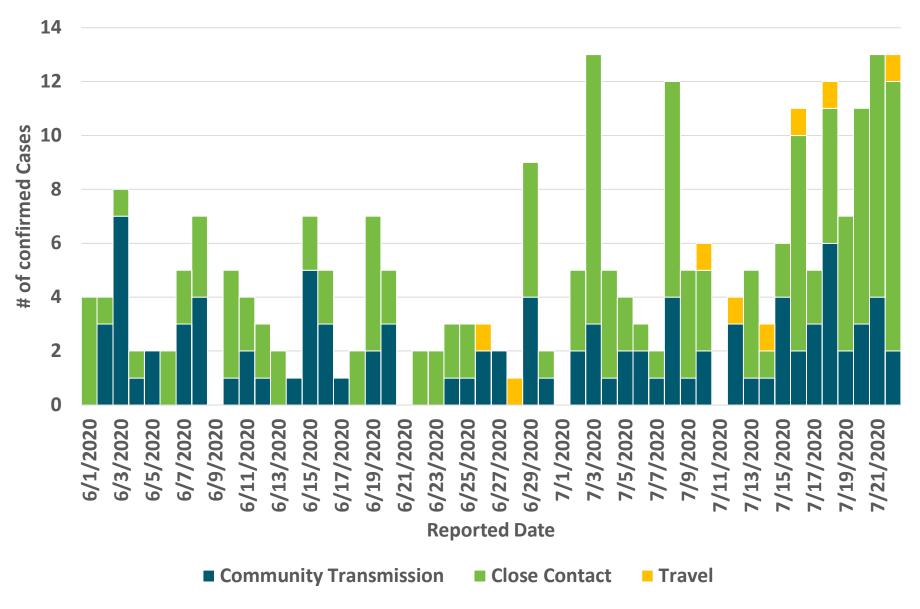
Exposure History by Reported Date



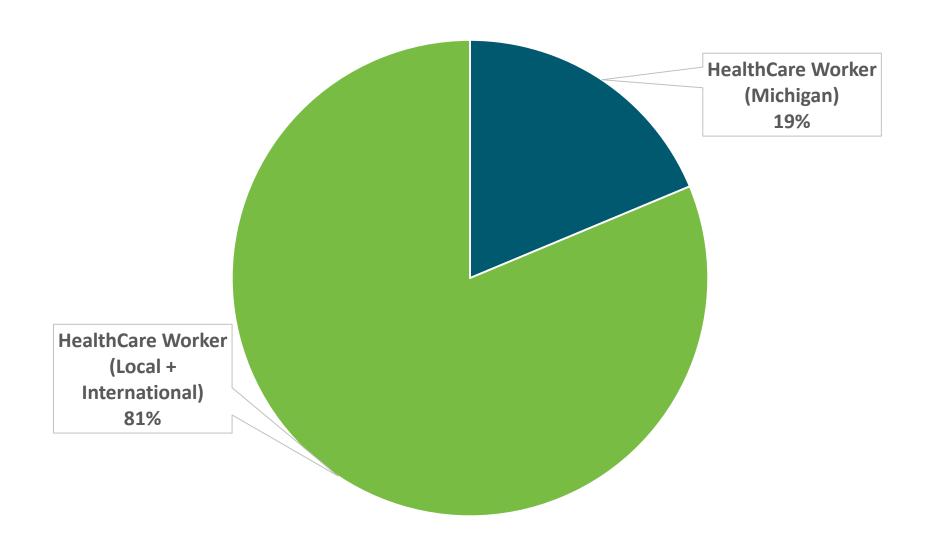
Exposure History by Reported Date Among Agri- Farm Workers



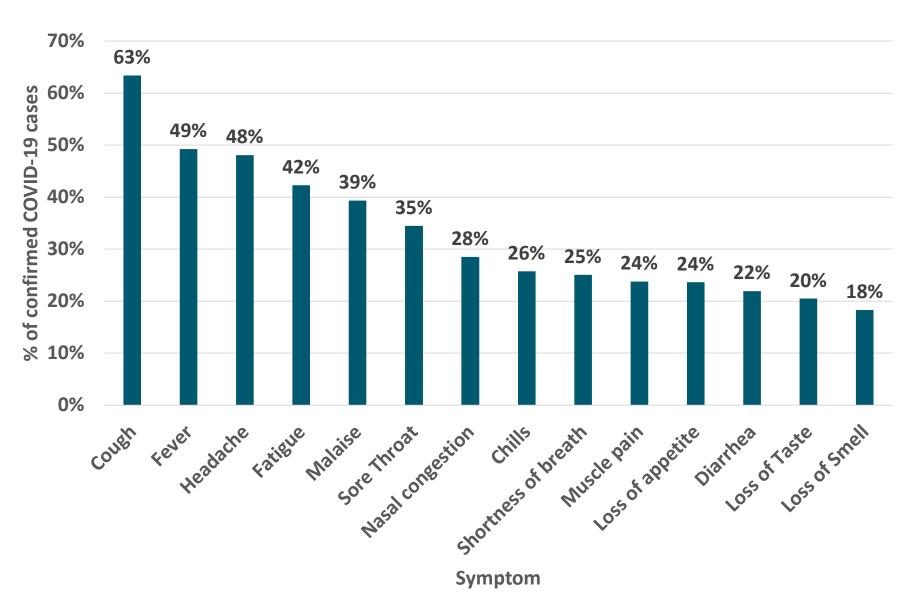
Exposure History by Reported Date Among Non- AgriFarm Cases



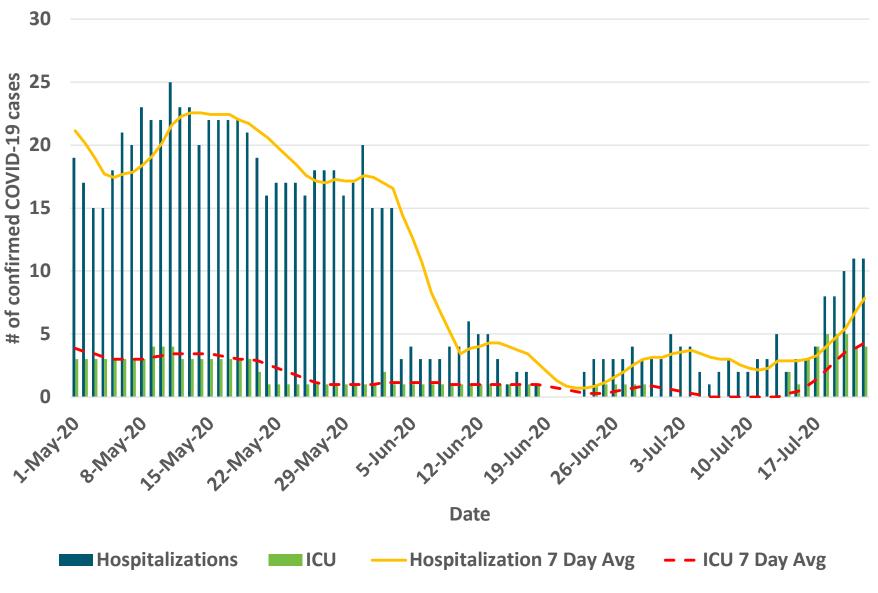
COVID-19 Cases by Healthcare Worker



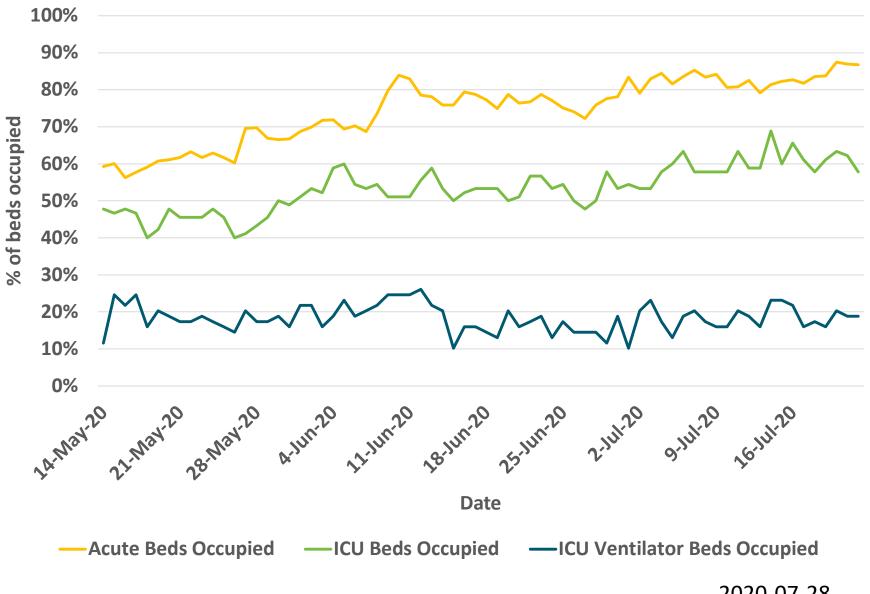
Most Common Symptoms



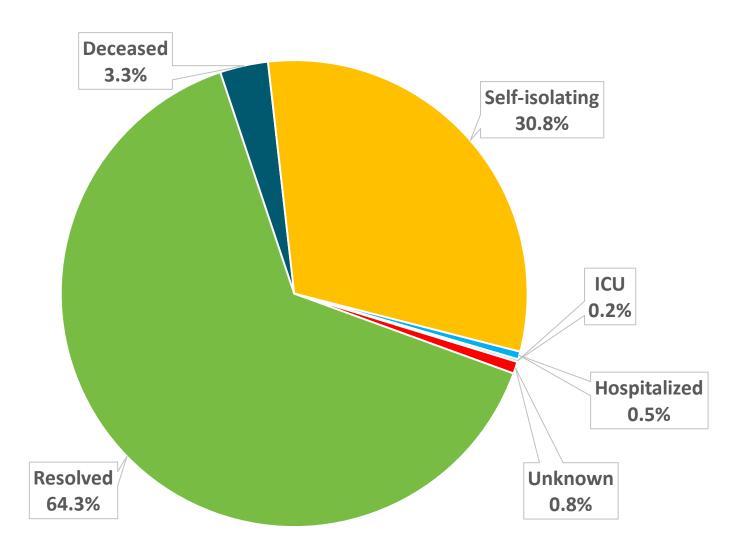
Hospitalizations & ICU for COVID-19



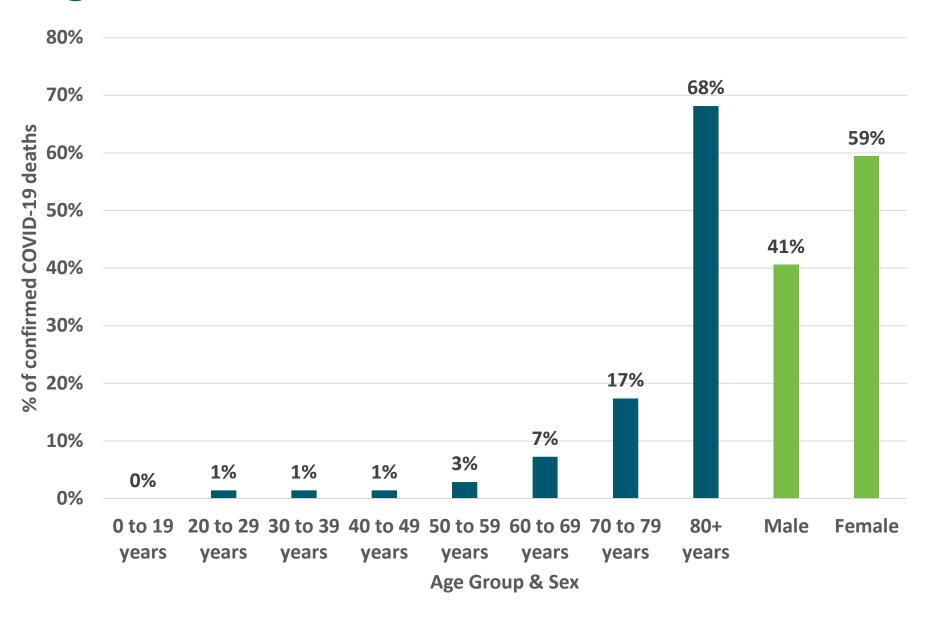
Health Care System Capacity



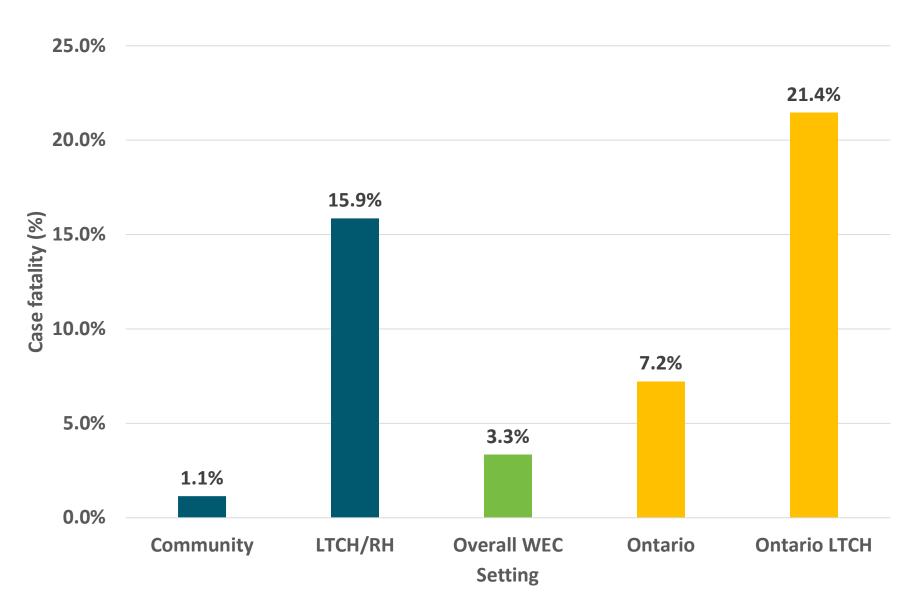
Current Outcomes



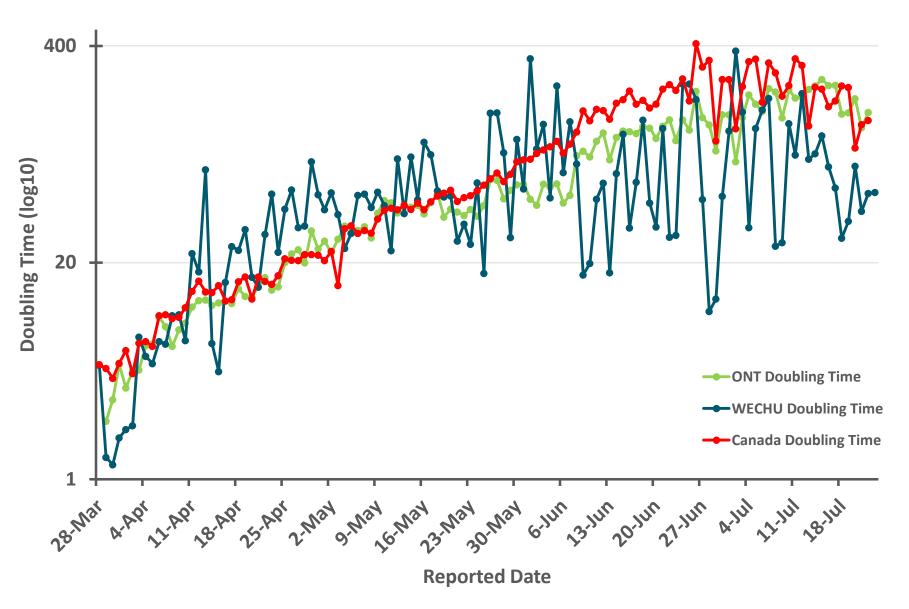
Age & Sex Breakdown of COVID-19 Deaths



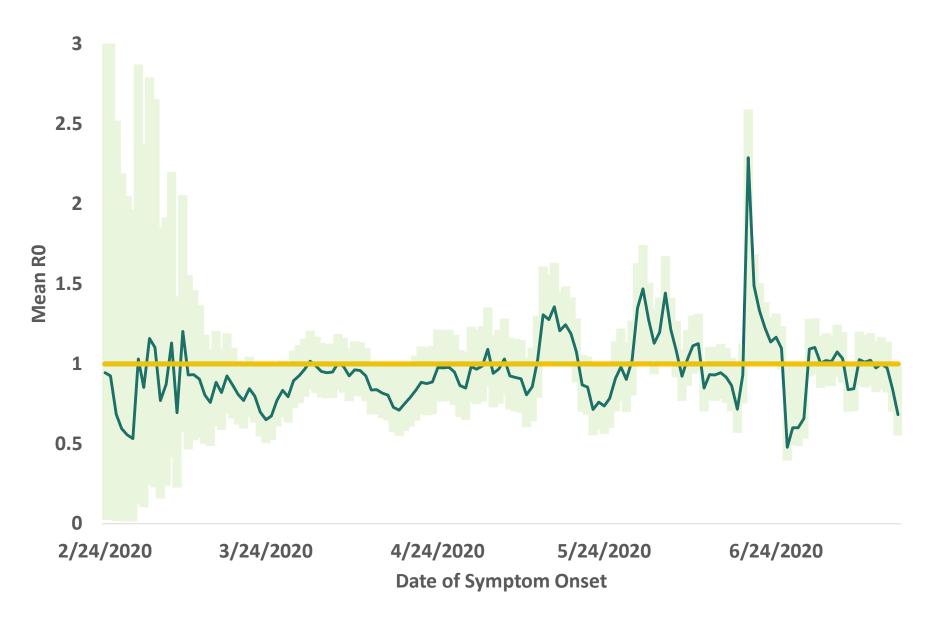
Case Fatality Rate



Doubling Time (Day over Day Comparison)



Mean R0 (Effective)



Summary

- Windsor-Essex is seeing more cases outside of the agri-farm sector
- The primary source of exposure is through close contact with a confirmed case
- COVID-19 related hospitalizations and ICU have increased in the last 7 days
- R0 (effective) value is 0.83 indicating a decrease in transmission in Windsor-Essex
 - BUT we have seen variations in the past 1.5 months